Q. VALUATION OF MEDICAL PRACTICES

by
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1. Introduction

This article updates an article in the 1995 CPE text, at pp. 162-81, on the valuation of medical practices. Part 2 explains why exempt hospitals are acquiring physician practices. Part 3 provides an introduction to methodologies for valuing business enterprises such as physician practices. Part 4 explains the cost approach to the valuation of a medical practice. In Part 5, the market approach is discussed. Finally, Part 6 provides an in-depth discussion of the income approach to valuing a medical practice. Part 6 also discusses an "allocation" method to business enterprise valuations which combines elements of the other approaches and avoids their major drawbacks.

2. Integrated Health Care Structures

A. Background

The cost of health care affects everyone. Most people in the United States pay a significant amount of their income, directly and indirectly, for health care. Individuals pay directly for physician and hospital services and health care insurance. Indirectly, third parties (such as taxpayers) pay for health care by funding social programs such as Medicare, Medicaid, and medical research.

In recent years, health care costs have consumed increasingly greater portions of individual and government wealth. The Health Care Financing Administration (HCFA) estimates that in 1993, national health expenditures were $940 billion, or 14 percent of the gross national product. HCFA projects that if the health care system is not significantly reformed, per capita health expenditures could exceed $4,000 in 1995 and $6,100 in the year 2000.

Spiraling increases in health care costs have spawned innovative solutions to reduce the price, increase the quality, enhance the efficiency, and improve the availability of medical services. The integration of hospitals and physicians into single organizations with the common goal of benefiting the community is part of this movement. This marriage of previously unlikely partners is called an integrated delivery system ("IDS"). (For an updated discussion of IDSs, see Topic

P, this text.) As with most marriages, money is often an important consideration. HCFA estimates that $175 billion a year is spent on physician services. Thus, hospitals have a monetary incentive to participate in this marriage.

IDS's are often dynamic and complex arrangements. Generally, a separate non-profit organization, controlled by an IRC 501(c)(3) hospital, is created to provide outpatient clinical services by purchasing a for-profit medical practice. The new IDS organization, either separately or in conjunction with its affiliated hospital, offers integrated hospital and physician services to the community. Determining whether this new organization is exempt often presents a challenge to the Service.

B. Why Hospitals Purchase Medical Practices

A hospital that purchases a physician practice generally does so in order to provide a charitable service to the community, as well as to obtain the direct and indirect revenues from that business. Direct revenues come from providing outpatient services. The economic return to the hospital from direct revenues of an acquired medical practice may be nominal, however, and direct revenues are often not the only source of anticipated economic return.

Indirect revenues flowing from the referrals of the clinic's patients to the hospital for services often provide significant returns on the acquiring hospital's investment. At any given time, 60 percent of hospital beds are empty (Source: 1985, 1989-90, 1990-91, 1991-92 Hospital Statistics, American Hospital Association). Thus, an important factor in hospital acquisitions of outpatient facilities such as physician practices is hospitals' desire to position themselves for referrals of inpatients. The importance of this factor is expected to increase as health care services are increasingly shifted from inpatient to outpatient settings, under the influence of managed care payment systems.

Federal (and state) laws prohibit payments for referral of Medicaid and Medicare patients. See 42 U.S.C. 1320a-7b(b)(1), (2); Omnibus Budget Reconciliation Act of 1993, 13562, 107 Stat. 312 (1993); and 1995 CPE text, at pp. 173-75. For this reason, valuation appraisals of medical practices do not reflect the indirect value of referrals to hospitals.

C. Why Physicians Sell Medical Practices

Just as hospitals buy medical practices for economic and non-economic

reasons, physicians who sell their practices do so for a variety of reasons. Physicians want access to "global" managed care--arrangements that include a hospital element as well as the physician component. In competing in the managed care environment, physicians can benefit from the capital and marketing power of established hospitals and their access to health care plans. In addition, many physicians wish to sell appreciated assets and stop being business managers and owners.

In short, physicians are increasingly losing their independence and traditional means of earning income. Understandably, they want to be compensated for this loss. Therefore, physicians demand the highest possible price for their medical practices.

D. Exemption Considerations

(1) Criteria for Exemption of Health Care Providers

IRC 501(c)(3) describes organizations organized and operated exclusively for charitable purposes, no part of the net earnings of which inures to the benefit of any private shareholder or individual. Rev. Rul. 69-545, 1969-2 C.B. 117, establishes the "community benefit standard" for the exemption of health care providers, and focuses on a number of factors indicating that the operation of a hospital benefits the community rather than serving private interests. The revenue ruling holds that a properly organized nonprofit hospital will qualify for exemption where (1) it has a board composed of prominent citizens drawn from the community (as opposed to physicians, administrators, or others with a private interest in the organization); (2) it has a medical staff open to all qualified physicians in the area, consistent with the size and nature of its facilities; (3) it operates a full-time emergency room open to all persons, without regard to ability to pay; and (4) it provides non-emergency care for everyone in the community able to pay the cost thereof, either themselves, through private health insurance, or with the aid of public programs such as Medicare. The Service has consistently interpreted and applied the phrase "public programs such as Medicare" in Rev. Rul. 69-545 as including Medicaid.

(2) Private Benefit

An organization cannot be organized or operated exclusively for charitable purposes unless it serves a public rather than a private interest. Thus, to meet the requirements of IRC 501(c)(3), an organization must establish that it is not

organized or operated for the benefit of private interests such as designated individuals, the creator or his family, shareholders of the organization, or persons controlled, directly or indirectly, by such private interests. See Reg. 1.501(c)(3)-1(d)(1)(ii). "Private shareholders or individuals" is defined as persons having a personal and private interest in the activities of the organization. See Reg. 1.501(a)-1(c).

The private benefit prohibition applies to physicians who, either individually or in a medical group, sell their assets to an exempt organization and subsequently perform services for it. Benefits to the physicians must be balanced against benefits to the public in deciding if private benefit is present.

(3) Private Inurement

Private inurement generally involves persons who, because of their relationship with an organization, can control or influence its activities. Such persons are sometimes referred to as "insiders." See American Campaign Academy v. Commissioner, 92 T.C. 1053 (1989).

In some circumstances, physicians may be "insiders" with respect to an organization to which they sell their practices. In that case, the inurement proscription applies in addition to the prohibition on private benefit. The payment of amounts exceeding fair market value for the medical practice assets acquired from physicians may thus cause an organization not to qualify for IRC 501(c)(3) status.

(4) The Importance of Valuation Principles in Exemption Determinations

In deciding if an IDS organization providing health care services qualifies for exemption under IRC 501(c)(3), the Service applies a "facts and circumstances" approach based on Rev. Rul. 69-545, supra. An important factor in determining if an organization operates exclusively for the benefit of the community, as opposed to private interests, is whether the organization's acquisition of assets from physicians confers private benefit on, or causes its earnings to inure to, the sellers. If the organization pays more than fair market value, private benefit, and possibly inurement, is present, and the organization does not qualify for exemption.

Fair market value is the price on which a willing buyer and a willing seller

would agree, neither being under any compulsion to buy or sell, and both having reasonable knowledge of the relevant facts. See, e.g., Rev. Rul. 59-60, 1959-1 C.B. 237. As discussed in the 1995 CPE text, at pp. 163-69, whether the price paid for assets exceeds fair market value may be determined in various ways. It is the putative exempt organization's burden to establish this fact. In ruling on initial applications for recognition of exemption under IRC 501(c)(3), the Service does not determine that the price paid is fair market value; it does, however, require applicants to establish that the methodology used to arrive at the price is reasonably likely to result in a final sales price consistent with the requirements for exemption.

Generally, where the sales transaction involves unrelated parties bargaining at arm's-length, the actual sales price may be assumed to be fair market value. However, when hospitals acquire practices owned by physicians who are on their medical staffs, and who continue to provide services through a new affiliated organization, the existence of arm's-length bargaining may be questionable.

In the absence of an arm's-length transaction, the best determinant of fair market value is a properly performed, unbiased valuation appraisal of the medical practice. The remainder of this article describes general valuation methodology principles, and notes particular issues/concerns in the valuation of medical practices.

3. Business Enterprise Value

A. Business Enterprise Value Defined

Fair market value is determined within the framework of the business enterprise's value ("BEV") to a hypothetical purchaser; it is not appropriate to assume a particular purchaser, such as an exempt hospital or a commercial health care corporation. Thus, for example, as discussed in the 1995 CPE Text, at pp. 167-68, it is inappropriate to assume that the acquired practice will not be subject to federal income taxation because it will be tax-exempt; or that the purchase will bring certain "synergies" or management improvements to the business being valued.

BEV is generally defined as the total value of the assembled assets that comprise the entity as a going concern, or the value of a company's capital structure. BEV can be defined in other ways. A technical definition states that BEV is the capital structure of the business, the components of which are common

(partner's) equity, preferred (stockholder's) equity, and long term debt. If long term debt is removed, what is left is equity, or the net worth of the firm.

B. How Is BEV Determined?

A valuation appraisal should include all recognized approaches for estimating BEV, including the market approach, cost approach, and income approach. The income approach is generally employed in IDS cases, because it includes the "excess earnings method" described in Rev. Rul. 68-609, 1968-2 C.B. 327, and approved for the valuation of intangible assets acquired by exempt organizations in Rev. Rul. 76-91, 1976-1 C.B. 149. Valuation analysts general favor the income approach in appraising physician practices.

While BEV may appropriately be measured using the income approach, it is important to note that the approach (which includes a number of different methodologies) frequently depends on assumptions made about future events; information upon which the assumptions are based is under the control of the parties - who may not be dealing at arm's-length - and is often difficult to verify. Different assumptions can result in different values. Thus, the factual assumptions upon which such a valuation is based should be reviewed carefully to ensure that they are realistic, and if the valuation uses the income approach, it should be confirmed, if possible, by the cost and market approaches. Requiring that multiple approaches be used is consistent with the statement in Rev. Rul. 68-609, supra, that "[t]he formula [income] approach may be used for determining the fair market value of intangible assets of a business only if there is no better basis therefor available."

The value of intangible assets is particularly difficult to measure, and it is with respect to valuation of intangibles that inflation of value is most likely to occur. Valuation of intangibles is made even more complicated by the fact, referred to in Part 2-B, above, that valuation analysts are constrained from assigning value to the anticipated indirect revenues from referrals. Often, the same value is assigned to other intangible assets.

C. "Allocation" Valuation

Once arrived at, BEV is allocated among the assets comprising the business enterprise. The individual assets are valued, using appropriate methodologies; the aggregate value of the individual assets thus arrived at should equal the BEV.

This process is sometimes referred to as the "allocation" technique. The cornerstone of this technique is its combination of the cost and market approaches with judicious use of the income approach.

When this technique is used in valuation appraisals to allocate asset value, the result is a report containing predominantly verifiable information which facilitates review. In addition, tensions relating to payment for intangible assets are reduced where the elements of value are clearly delineated and verifiable.

Under this technique, assets capable of valuation under a non-income (i.e., cost or market) approach are valued under that approach. An income approach is then used to value only those assets not susceptible to valuation by another approach. The values obtained are aggregated to reach BEV for the overall enterprise.

The following suggests approaches for valuing assets commonly found in medical practices:

Tangible Assets	**Approach**
Medical and office equipment, furniture, and fixtures	Cost
Buildings and real estate (including leases)	Market

Intangible Assets	**Approach**
Medical records	Cost
Assembled work force	Cost
Computer software	Cost
Covenants not to compete	Income
Contracts	Income
Trade name	Income
Below-market leases	Income

Application of the allocation technique is further explained in Part 6-J, below. Exhibit B to this article provides an example of the allocation technique for the hypothetical medical practice valued under the income approach in Exhibit A. Notice that the cost and market values of the tangible assets, combined with the value of the intangible assets, equals the BEV determined under the income

approach.

4. Cost Approach

A. In General

The cost approach to asset valuation measures value by determining the cost to replace or reproduce an asset, less an allowance for physical deterioration or obsolescence. Similarly, when used to value an entire business enterprise, the cost approach uses the fair market value of the enterprise's individual assets as a starting point. After the fair market value of the individual assets is estimated, the book value of liabilities is subtracted to arrive at an indication of the cost value of the business.

B. Different Methods for Valuing Assets Under the Cost Approach

In valuing tangible assets it is generally agreed that assets remaining in place are worth more than assets that are moved. The idea behind this principle is that the purchaser has the "turnkey" value of the assets--the immediate use of an accumulation of assets that allows the purchaser the ability to walk into a business and operate it immediately.

The cost approach embraces a number of methods for determining fair market value. Use of the various methods creates a scale of value ranging from high to low.

Cost of reproduction. At the top of the value scale is the cost of reproduction. It is often very expensive to reproduce an asset. For example, consider the cost of an office building. Modern buildings are normally constructed with poured concrete, not marble which was once a more common building material; a marble building constructed today is far more expensive than the same building constructed with poured concrete. Applying the reproduction cost method to a marble office building would result in a relatively high valuation.

Cost of replacement. Next on the scale is the cost of replacement. Replacement cost forms the basis of the fair market value in use ("FMVIU") method of valuation. Under FMVIU, assets are valued by subtracting the seller's portion of "estimated use" of the property from current replacement cost (versus original cost/price paid by the seller). Estimated use is the "working life" of an asset; this is not the same as depreciated life, which is based on artificial time

limits established to depreciate or amortize assets for tax purposes. Thus, an amount representing the seller's use of the asset is subtracted from current replacement cost to arrive at FMVIU. While this method results in values at the higher end of the scale, its logic may be seen from the following example.

> **Example:** In 1995, Purchaser is buying an examination table acquired by Seller in 1989 for $1,000. In 1995, the same (or comparable) table costs $1,500. The replacement cost in 1995 is $1,500. The value of the estimated use by Seller for 6 years is $800. Thus, the "replacement" value or FMVIU is $700.
>
> Under the FMVIU method, the appraiser begins with the replacement cost of 1989 technology in 1995 which can be readily ascertained through equipment or furniture suppliers or price guides. An allowance is made for previous estimated use, preventing private benefit/inurement concerns that results if the purchaser paid a price which did not reflect usage. The logic justifying paying based on current (vs. original) cost relates to the fact that the asset will remain in place; no money is spent on the purchase, assembly, or training costs needed to operate the asset. The FMVIU method thus allows the purchaser the turnkey value of the accumulation of assets.

The FMVIU method has two recognized pitfalls. First, the appraiser must consider the possibility of functional obsolescence (e.g., is the 1989 examination table functionally equivalent to the 1995 table?) and make appropriate reductions for obsolescence. For many assets in a medical practice (tables and some office and medical equipment, for example), obsolescence is not a significant factor. For other assets (office computers and high technology medical equipment, for example), functional obsolescence may be significant and the valuation should recognize this. Second, the appraiser must consider the actual physical use the asset has sustained. Physical use is an important consideration with older furniture, office and medical equipment, and fixtures. The appraiser must examine each article, note its condition, and add or subtract for physical use. If functional obsolescence and physical use are taken into account, however, the FMVIU method is a reasonable approach to evaluating a medical practice's tangible assets. See American Society of Appraisers, Appraising Machinery and Equipment, p. 86 (1989).

Actual cost. Third down on the "value scale" is actual cost. This method uses the actual cost/original price of the asset (1989 price in the example above),

and makes a reduction based on estimated life of the asset. The actual cost method closely resembles FMVIU; the only difference is the starting point (original price versus replacement cost). It results in a lower value than FMVIU for the same asset because original cost is generally less than replacement cost.

Unlike FMVIU, this method does not account for functional obsolescence. Physical use is taken into account, however. This is the method often used to value assets of small medical practices with older equipment and furniture. (Logically, the purchaser in such a situation is less likely to leave the assets in place and therefore turnkey value is lower.)

Depreciated cost. At the bottom of the "value scale" is depreciated cost. This approach values assets at their actual cost/original price, and makes a reduction for scheduled tax depreciation. This approach generally results in the lowest price because tax depreciation schedules are frequently more generous than reductions based on estimated useful life.

5. Market Approach

A. In General

The second valuation approach, the market approach, measures value based on prices paid in the marketplace for similar assets. The market approach is familiar to home buyers who compare the value of homes they are interested in purchasing to recent prices paid for similar homes.

The market approach tracks actual sales of comparable assets or businesses. Projections and estimates, a necessary part of the income approach, are not used. The only subjective component of this approach involves determining appropriate adjustments for comparability.

B. Buildings, Real Estate and Leases

The market approach is an excellent technique to value buildings and real estate (including leases). Generally, a market valuation analysis starts by describing the community. The description provides important information about its economic, social, transportation, and environmental strengths and weaknesses.

Next, the building and land being appraised are compared to actual sales of comparable buildings and land in the community. The appraiser lists recent sales

transactions for office buildings and land. The list of recent transactions compares the property being appraised to that sold in recent transactions, in terms of such factors as building square footage, lot square footage, location, age, condition, quality of construction and design, and access to transportation. The appraiser visually inspects comparable properties to better evaluate their comparability to the subject property. After all important information is gathered, the appraiser estimates the value of the property being appraised by making appropriate comparability adjustments to the sales prices of the comparable properties. A final fair market value is determined using the impartial data based on the actual sales of comparable buildings and real estate in the community. Because this method relies on data derived from actual transactions, it is less subjective than the income approach.

C. Is the Market Approach Useful in Determining BEV?

The market approach is also used to determine the value of a whole business, not just its buildings and real estate. In a market approach to BEV a meaningful (though approximate) comparison must be made of the seller's business to similar businesses.

In selecting comparable companies for the medical practice being appraised, the appraiser first looks to the public marketplace, because more information is available on public companies than private businesses. The universe of possible comparable companies starts with all companies that provide health care services; it thus would exclude HMO's and other managed care entities, since managed care involves assuming health care provider risk whereas physician practices are primarily oriented to providing health care services and generally assume little provider risk. (In heavily "capitated" markets, where physicians are compensated primarily through capitated (managed care) arrangements, managed care companies might be appropriate "comparables," however.) Hospitals and home health care services would also be excluded because they provide specialty in-patient medical services or in-home secondary health care services respectively.

Publicly traded physician practices do not exist. Thus, there is no truly comparable business enterprise that can be used in applying the market approach. Companies that operate physician practices under long-term service arrangements may provide the closest available comparison. (For additional discussion of this issue, see Zukin, Financial Valuation: Businesses and Business Interests, 18B.10[2] (1995 Update).) Public information on the sales of medical practices is generally not available, since physicians normally like to keep this information

confidential. Thus, sales information on medical practices is difficult to obtain.

D. Is There a Market for Physician Practices?

An additional potential source of market information on medical practices are private "local" or "contractual" markets.

The sale of medical practices is a relatively new phenomenon. Unlike real estate, for which actual sales information is readily available, little accurate data exists on prices paid for medical practices. Because medical practices are not public companies and physicians generally view sales information as confidential, sales information is difficult to obtain. And even where such information is accessible, information demonstrating the "comparability" of the practices sold may not be available.

Where information about private sales of physician practices is used in the market approach, it should be substantiated by appropriate documentation.

E. Establishing Comparability

(1) Market Established by Actual Sales

Actual sales of physician practices in the same community as the subject practice may be used in the market approach. Where market information is included in a valuation, actual purchase prices paid for comparable physician practices should be evaluated, adjusted, and applied to the operating data of the seller's business to arrive at FMV. The factors affecting comparability between the market and the seller's business should be discussed.

Factors affecting comparability include markets served; practice and specialty type; competitive position; profitability; growth prospects; risk perceptions; financial composition (capital structure); physician compensation; physician age, health and reputation; physician productivity; average revenue per physician; cost structure; and average revenue per visit or covered life to revenue mix (capitated versus fee-for-service). See Financial Valuation: Businesses and Business Interests, at 18B.10[3].

(2) Market Established by Offers

Market information involving letters of intent or memoranda of

understanding to purchase medical practices could be used in a market approach. Because offers are not actual sales transactions, however, this information is inferior to actual sales transactions. Also, "comparable" information based on offers is only relevant when the offers are legally binding and contain detailed information about the terms and conditions of sale (e.g., price, financing, assets purchased, compensation to be paid for sellers' services as employees or independent contractors after the sale). Factors affecting comparability must be discussed in the appraisal report.

6. Income Approach

A. Introduction

The income approach focuses on incorporating the specific operating characteristics of the seller's business into a cash flow analysis. Discounted cash flow ("DCF") and excess earnings are two methodologies often used.

DCF is by far the most common methodology seen in appraisals of physician practices. For this reason, the following discussion focuses on that method. Exhibit A to this article summarizes a hypothetical DCF analysis, and is referred to throughout this discussion.

In a DCF analysis, cash flow that could be taken out of the company being valued without impairing operations and profitability is estimated. The cash flow available for distribution is reduced to a present value by applying a discount rate. Exhibit A, lines 15 and 16, demonstrates how the discount rate reduces future years' cash flow.

B. Estimation Period

The income approach to BEV is based on the fact that money received in the future has a lower present value than the same amount of money received today. The future time period over which cash flows are projected - generally five years in a medical practice valuation - is referred to as the **estimation** or **projection period**. Thus, a valuation will project the cash flow of a business to determine its present value as of the date of the appraisal. The sum of the present value of annual cash flows is added to the present value of the **terminal year** or **reversion** (the value of the cash flows at the end of the estimation period) to arrive at BEV. The mechanics of this calculation can be seen in Exhibit A, lines 16 through 19.

C. Normalized Financial Statements

The first step in a DCF analysis involves developing financial statements for the estimation period. This data is derived from historical financial information. Historical information should be adjusted, ("normalized") for any unusual or nonrecurring items that were included in the medical practice's financial results. The resulting financial information is called **normalized financial information.** This is reported in the left-most column of Exhibit A. Expected unusual occurrences or known changes in revenues or expenses for years included in the estimation period should be reflected only in the results of the year or years affected.

D. Assumptions

After developing normalized financial statements, reasonable **assumptions** are made about events affecting future cash flow: rates of revenue increase/decrease, patient volume, and rates of expense increase/decrease based upon current market conditions, growth, and inflation trends, for example.

Over-valuation problems often emerge at this stage. For example, projections of revenue growth may appear to be at odds with known market conditions in a particular area. Thus, revenue projections require close scrutiny to test their assumptions and make appropriate adjustments to normalized financial information. The following factors, derived from Cimasi, Valuation of Healthcare Professional Practice, ASA International Appraisal Conference, Seattle, Washington (June 29, 1993), may be used in verifying assumptions underlying revenue projections:

(1) **Who owns the patient base - payor or physician?** In a managed care arrangement, the patient goes where the payor directs, affecting the base upon which revenues are projected.

(2) What is the mix of managed care and fee for service? The larger the percentage of income generated by managed care, the greater the guarantee of revenues. Thus, the mix of managed care and fee for service arrangements is an important factor in revenue projections, as are the length of managed care contracts and the probability of their renewal.

(3) **A description of the physician practice**. This description should include a description of the medical community environment (primary service area of the practice and local medical competition, including number of practitioners in the specialty of the subject practice and other specialties). It should also thoroughly analyze the patient base. This may include a discussion of the volume and quality of patient charts, patient age mix and demographics, and payor source. The age of physicians and number of years in practice should be stated.

(4) Are necessary adjustments made to the income stream? Future cash flows/income may need to be adjusted for--

(a) Diagnostic Related Groups ("DRG's") which are now being applied to certain physician services under Medicare.

(b) The incorporation of pre- and post-surgical care into global surgical fees that incorporate pre-surgical and post-surgical care along with surgery. In a surgical specialty, only the portion of payments reflecting the surgical component should be included in revenue projections.

(c) Increases or decreases in fees or capitation because of competition and government regulations. These might include, for example, expected decreases in physician referrals resulting from changes in federal anti-kickback laws, noted in Part 2-B, supra.

(d) Effects of "tightening" of federal anti-referral restrictions. (Stark I and II). See 1995 CPE Text, at p. 176.

(e) Does the cash flow analysis include under

expenses or salary the higher salaries for the additional non-physician staff with the requisite training needs (i.e., gate keepers).

Assumptions are also made about expenses. While not as many problems appear here, expense projections and assumptions should also be carefully reviewed to ensure they are reasonable and appropriate.

E. Earnings Before Depreciation, Interest and Taxes ("EBDIT")

After projecting reasonable levels of revenue and expense, the resulting figure is **EBDIT** - earnings before depreciation, interest, and taxes. (In Exhibit A, EBDIT appears on line 4). Sometimes valuations include amortization (depreciation of intangible assets) into the formula. Thus the formula appears as **EBDITA** - earnings before depreciation, interest, taxes and amortization.

EBDITA is often used as a measurement to compare one business investment with another. Valuation analyst will divide EBDITA by revenues to obtain a EBDITA\revenue ratio. This ratio is then compared to industry averages to determine how the proposed investment compares with the industry at large.

F. Earnings Before Taxes ("EBT")

EBDIT is then adjusted by subtracting depreciation/ amortization (Exhibit A, line 5). The result is **EBT** - earnings before taxes (Exhibit A, line 6). Then, a tax rate is applied to determine net income after taxes (Exhibit A, line 7). Topic L in the 1995 CPE Text, at p. 167, discusses the importance of using after-tax cash flows in a DCF analysis.

G. Cash Flow Available for Distribution

Net income after taxes (Exhibit A, line 8) is then adjusted for depreciation/amortization, changes in working capital, and capital expenditures (Exhibit A, lines 9-11). The result is debt-free cash flow available for distribution (Exhibit A, line 12).

H. Discount Rate

The next key step in a DCF analysis is discounting the cash flows for the estimation period and the terminal year. In each succeeding year, cash flows are

discounted (reduced) by a higher percentage. This effect is seen by comparing lines 12 and 16 on Exhibit A; notice how the discount rate reduces the value of the cash flows in the various columns in line 12.

The discount rate is a key component of a valuation based on a DCF analysis. The rate should reflect the risk of the investment in the business. Investment risk represents the probability of failure; prudent investors examining two investments, each having a similar rate of return, prefer the investment with less risk. However, an investor may be induced to participate in the riskier investment if the price is lower.

Choosing a correct discount rate is an important component of a valuation. The discount rate determines the value of the cash flows during the estimation period and the terminal year. The important concept to understand is the lower the discount rate, the higher the current value of the cash flows--the basis for the sales price of the physician's practice. Sellers generally want low discount rates while purchasers want high discount rates. See Gordon V. Smith & Russell L. Parr, Valuation of Intellectual Property and Intangible Assets 259 (1989).

The methodology most commonly used to determine the discount rate in a DCF analysis is the **weighted average cost of capital (WACC)**. The theory behind cost of capital discounting techniques is that they allow alternative potential investments to be compared by using an identical set of yield performance standards.

(1) Cost of Capital

The cost of capital is the minimum rate an investment must yield to provide a required return to all sources of capital. Sources of capital include common and preferred stock, long-term debt, and retained earnings. Debt has a lower cost of capital than equity because it has a priority claim on earnings and assets in liquidation. The overall cost of capital is a function of the relative proportions of debt and equity. As more debt is added, the cost of capital declines.

(2) Cost of Equity

The Capital Asset Pricing Model ("CAPM") is the traditional approach to determine the cost of equity capital in a BEV. It was judicially accepted in Northern Trust Co. v. Commissioner, 87 T.C. 349 (1986). CAPM is based on the principle that a business enterprise's required rate of return (cost of equity capital)

is related to the current interest rate environment, the expected volatility of investment returns, and the market equity risk premium in excess of the current risk free rate of return. See Brigham, Financial Management: Theory and Practice, p. 551 (1982).

CAPM evaluates the relative risk of a particular investment compared to the average return on all common stocks. It does so through use of a formula:

Ke = Rf + B1 (Rp) + Rs

or

Required Equity Rate of Return (Ke) = The Risk Free Rate (Rf) + Investment's Beta (B1) x Market Equity Risk Premium (Rp) + Small Stock Risk Premium (Rs)

Risk free rate ("Rf"). The risk free rate is the yield on the U.S. Treasury obligation that matches the tenor of the investment being considered. With investments in publicly held companies, for example, the risk free rate is often based on short term Treasuries, mirroring the liquidity of such investments. For purposes of medical practice valuations, however, the 30-year Treasury yield is more appropriate and is generally used as the risk free rate; it reflects the long term nature of the investment and the anticipated long term partnership between the hospital and the physician practice.

The 30-year Treasury yield as of 5/11/95, was 6.98%; on 5/11/94, it was 7.61%. Generally, the higher the risk free rate percentage, the higher the discount rate. If the other numbers in the Cost of Equity formula are constant the discount rate in May 1994 would be higher than in May 1995. Thus, in volatile markets, the timing of a valuation can significantly change the value of the physician practice.

Beta ("B1"). Beta is a pragmatic measurement of the historical correlation of the return on an investment in relation to overall market performance. An investment's Beta factor reflects the extent to which returns on it are affected by changes in returns on all assets in the economy. The most common method of estimating Beta uses the Standard & Poor's Index of 500 Stocks.

The Beta of an investment with an average volatility of return equals 1.0. The Beta of an investment with below-average volatility of return is less than 1.0, whereas the Beta of a stock with above-average volatility is greater than 1.0.

Value Line, Inc., and Standard and Poor's Corp. publish Beta values for stocks of publicly traded corporations.

Valuations of medical practices reviewed in the National Office in 1994-95 have typically employed Beta factors between 1.1 to 1.4.

Market equity risk premium ("Rp"). The market equity risk premium component of the cost of equity formula is an empirical measurement of the amount by which historical average return on common stocks exceeds the historical average return on risk free securities of a given type. Presently the market equity risk premium is 6.90% for average common stocks over the long-term, as stated in Ibbotson & Associates, Inc., Stocks, Bonds, Bills, and Inflation 1994 Yearbook. (Ibbotson & Associates compiles and analyzes market results for stocks, bonds, and U.S. Treasury bills. Its indexes described in this article are widely used in DCF analyses.)

Small stock risk premium ("Rs"). Since medical practices are less marketable than many investments, the cost of equity formula should generally include an adjustment - referred to in the CAPM formula as a small stock risk premium - for lack of marketability. This adjustment reflects the fact that investments that lack marketability sell at a discount from the prices of comparable publicly traded shares. See Emory, The Value of Marketability As Illustrated in Initial Public Offerings of Common Stock - August 1990 through January 1992, Business Valuation Review, pp. 208-12. It should be noted that since the marketability discount is factored into the discount rate through the small stock risk premium, it should not be applied also at the end to the final value developed for the medical practice through use of the income approach since that would be "double counting."

The current small stock risk premium is 5.3%. See Ibbotson & Associates, supra. It is not unusual for valuations to add a "premium for specific risks" of between 4% and 8% to the cost of equity calculation. The premium for specific risks is added because Ibbotson small stocks consist of publicly traded equities with a market capitalization less than that of the lower one-fifth of the New York Stock Exchange. Thus, the small stock premium is based upon securities issues that are still quite large and for which public information is readily available.

The following is an example of a cost of equity (Ke) calculation using the data discussed above.

Ke = Rf + B1 (Rp) + Rs
1.3% x 6.9%

21.25% = 6.98% + 8.97% + 5.3%

(3) Weighted Average Cost of Capital ("WACC")

Once the valuation analyst calculates the cost of equity, the discount rate can be determined. As noted above, the weighted average cost of capital ("WACC") methodology is commonly used for this purpose. WACC is derived from the cost of equity, the after-tax cost of debt, and the relative proportions of debt and equity financing, using the following formula:

WACC = Kd x (1-t) x D% + Ke x E%

Cost of debt ("Kd"): Selecting an appropriate cost of debt ("Kd") generally begins with the prime rate plus basis points, if applicable. This information is included in the business sections of major newspapers and also appears in the Federal Reserve Statistical Release. On May 12, 1995, the prime rate was 9% with no points. The cost of debt that should be used should match that of the medical practice being valued or that of the publicly traded comparables, which is typically higher than the prime rate.

Cost of equity ("Ke"): Cost of equity ("Ke") is the percentage (21.25%) calculated using the CAPM formula, discussed above.

Debt ("D"): Debt ("D") is generally stated as a percentage of total capital in capital structures similar to seller's business. In this example 14% is used which is the average amount of debt in the closest comparable companies.

Equity ("E"): Equity ("E") is stated as a percentage of total capital in capital structures similar to seller's business. In this example 86% is used which is the average amount of equity in the closest comparable companies.

Tax rate ("t"): Tax rate ("t") is the appropriate combined federal, state, and local income tax rate for the medical practice. With a rate of 40%, in the above formula (1-t) equals .60.

Once the variables are derived using the appropriate methodology, WACC may be calculated:

WACC = Kd x (1-t) x D% + Ke x E%
9.00% x .60% 21.25% x 86%
5.4% x 14% +
.76% + 18.28%

WACC = 19.04%

Discount rates (WACC) used in valuations of medical practices reviewed at the National Office during 1994-95 have generally ranged between 16% and 21% depending on variations in the cost of equity, cost of debt, and the debt/equity ratio at the time of appraisal.

I. Terminal Value Exit Multiples

The terminal value is a very important calculation in a DCF analysis. It is an estimate of the worth of a business's cash flows beyond the estimation period. The terminal value can represent between 50% and 150% of the total value determined by a DCF analysis. This inflating effect is demonstrated in Exhibit A, lines 12-14 (far right column). Notice how line 12 - the debt-free cash flow available for distribution in the fifth (final) year - is multiplied by the exit multiple - 5 - in line 13, to reach the terminal value - in line 14. In this example, the terminal value is based on the capitalization of the business's debt free cash flow at a rate equal to the discount rate less its expected long-term growth rate.

Exit multiples ranging from 3 to 8 are generally seen in valuations of medical providers. Lower multiples within that range might be seen in a medical practice consisting of older physicians in a specialty affected by managed care, for example, whereas a valuation of a practice consisting of younger, primary care practitioners who will benefit from managed care might use a somewhat higher multiple. An exit multiple at the high end of the range might be seen in an appraisal of an established outpatient specialty center - an ambulatory surgery center, for example - which is positively affected by favorable reimbursement policies and managed care.

Given the exit multiple's influence on the "bottom line" in a DCF analysis, it is important to examine critically the criteria used in selecting it. Factors reasonably relevant in selecting an exit multiple include the following:

. the growth and stability of the local market environment as suggested

in the financial forecast;

. long term growth expectations for the industry;

. the perceived quality and composition of the valuation target;

. exit multiples used in similar transactions;

. the interest rate environment at the time of valuation;

. the financial and business risk of the valuation target; and

. the weighted average cost of capital used in the valuation.

J. Validating the Bottom Line Using the Allocation Technique - Valuation Methodologies for Intangible Assets

(1) Introduction

The last step in a DCF analysis is totalling the present value of the cash flows during the estimation period and the present value of the terminal year, to arrive at BEV (Exhibit A, lines 17-19).

BEV determined under an income approach is often greater than the combined fair market value of equipment, furniture, and fixtures (determined under the cost approach) and buildings and real estate (determined under the market approach), because it includes the intangible value of the business as a going concern - i.e., the goodwill of the business.

Goodwill represents the intrinsic value in a viable, competitive, and well run business that exceeds the value of its tangible assets. "Goodwill is comprised of patronage, excess earnings and residual. This is a permutation of the excess earnings concept because the value of the enterprise will only exceed the value of the identifiable assets (and create room for the residual) if there are excess earnings." Valuation of Intellectual Property and Intangible Assets, supra, at 88.

(2) Goodwill in the Allocation Technique

The value of goodwill can be allocated to specific intangible assets; the value of the latter is limited to the value of the former, as calculated under the

income approach. For example, if the total value of the individual intangible assets exceeds the total value of the medical practice net of the aggregate fair market value of the tangible assets, the amount of value that can be allocated among the intangible assets is more limited. Also, it is important to note that intangible value may not always be present in a medical practice.

Thus, ascribing value to intangible assets is a matter of allocating value derived using the income approach to specific intangible assets. The following example illustrates this process:

> **Example:** The BEV of a medical practice under the income approach is $12,200,000. Medical equipment, furniture, and fixtures have a value of $2,200,000 determined under the cost approach. Buildings and real estate have a value of $6,400,000 determined under the market approach. The maximum value attributable to all intangible assets is $3,600,000.

Applying the allocation technique introduced in Part 3-C, this value should be assigned to specific intangible assets using appropriate valuation methodologies for each asset. As discussed above, this method helps validate the inherently subjective nature of the income approach, and ensure that the valuation process does not result in payments for patient referrals.

Methods for valuing specific intangible assets commonly present in a medical practice are discussed below.

(3) Medical Records

Accurate and readily accessible medical records are an important asset of an operating medical practice. In addition, a growing market exists for the information in these records. Depending on such factors as how long the practice has operated and how many physicians it has, medical records can number in the hundreds of thousands and extend back a lifetime.

How long records are retained in a medical practice may depend on professional standards, state law, and practice in a particular community. Professional standards indicate that it is ordinarily sufficient to retain patient records for 10 years; after that, records can be destroyed unless destruction is prohibited by law. This is based on a 1974 study by the American Hospital Association's Committee on Medical Records and the American Medical Record

Association's Planning and Bylaws Committee. State laws (and federal regulations applicable to provider participation in health care benefit programs) vary in their requirements. California, for example, generally requires that medical records be retained for 7 years; pediatric records must be kept for 18 years, while obstetric-gynecology and worker's compensation records must be retained for 30 years and records that have been subjected to legal subpoena must be maintained for the patient's lifetime. See Cal. Health & Safety Code 1457. In some communities, general practice is to retain medical records indefinitely.

The cost method is commonly used to value medical records, based on the concept that the value of each medical record incorporates the cost of creating and maintaining it. For a large practice, cost is calculated based on annual medical records department expenditures for creating/maintaining records, minus the portion of those departmental expenditures for withdrawal of records, divided by the number of records created/maintained in that year. (For smaller practices a similar methodology, using the salary of records retention personnel or a portion thereof, is used.) Applying this approach typically results in a new per record value ranging from $12-20. Rough validation of the per record value can, where appropriate, be secured by comparing the amount determined under the cost method to what it would cost to secure copies of the records at rates imposed by state and federal social service agencies, insurance companies, and law firms.

Medical records diminish in value once a patient is no longer a regular patron of the practice. Thus, a reasonable allowance for depreciation is made when valuing medical records under the cost approach. Two bases sometimes used to establish a depreciation period (useful life) are the average term of residence in the community where the practice is located and the legally required retention period for medical records. Thus, if a seven-year depreciation period is used, one-year-old records lose 14% of their cost value while six-year-old records lose 86% of their cost value.

(4) Assembled Work Force

A well trained, organized, and efficient work force is a valuable asset in any business. The value of the assembled non-physician work force in a medical practice may be appraised using the cost approach, and depends on the number of full- and part-time employees, their positions, and the annual employee turnover rate (typically 15-35%). Use of the cost approach is based on the premise that for a potential buyer to re-create the particular practice, it has to hire and train a similar work force; that hiring/training process has identifiable costs - for recruitment,

orientation, training, and lost salary - that form the basis of the valuation process. In general, the cost approach uses historical expenditures for these items to derive cost amounts which are multiplied by the number of employees in various job categories to derive the value of the assembled work force. Historical expenditures for the work force should be adjusted to levels in existence as of the valuation date.

(5) Going Concern Value

Going concern value has been defined as "the additional element of value which attaches to property by reason of its existence as part of a going concern." VGS Corp. v. Commissioner, 68 T.C. 563, 569 (1977), appeal dismissed (5th Cir.). For example, compare a building that will house a retail business with an operating business in an identical building. For the former to become functional, it will have to incur costs to recruit and train employees, furnish the building, and market the product. The value inherent in the latter, over and above the value of the building, is its going concern value. The elements of going concern value are turnkey value and immediate use value. Miami Valley Broadcasting Corp. v. United States, 204 Ct. Cl. 582, 499 F.2d 677 (1974).

Medical practices have going concern value. The buyer of an existing practice purchases a turnkey operation and receives immediate value from the assembled work force and other assets needed to operate the business.

The cost approach can be used to determine going concern value, based on the concept that specific costs are associated with finding a location, purchasing or leasing furniture and equipment, marketing the business, and hiring and training the work force. Application of the cost approach to appraising going concern value thus involves a process similar to that explained above for valuing assembled work force. (Indeed, assembled work force may be viewed as a component or element of going concern value. Accordingly, it is inappropriate to value both assembled work force and going concern value.) Identifiable costs associated with creating going concern value are estimated and totalled to arrive at fair market value.

(6) Covenants Not to Compete

Sales of medical practices often involve the selling physicians' promises (covenants) not to compete with the new owners. An agreement by a seller not to compete with a buyer for a definite period of time after the sale may be a valuable

intangible asset to the buyer. Thus, if the economic effect of the covenant can be reasonably estimated, and the duration of the covenant is finite, the covenant's value may be quantified in monetary terms through a valuation appraisal. See Better Beverages, Inc. v. United States, 619 F.2d 424 (5th Cir. 1980), aff'g 44 A.F.T.R.2d 79-5101 (S.D. Tex. 1978); and Ansan Tool & Manufacturing Co. v. Commissioner, T.C. Memo. 1992-121.

The sale of a physician practice can entail several different covenants not to compete. Three types of covenants are typically present:

Between the individual employee physician and the selling medical practice (employer): This first type of covenant prevents the physician employee from competing with the employer during the term of employment and, depending on the terms of the covenant, may run for an additional finite period of time after termination of employment. This is the basic covenant that runs between an employee and an employer and sometimes is purchased by the IDS organization. This covenant benefits the employer because it protects against physicians leaving the practice with "their" patients.

Between the individual selling physician and the buyer: The second type of covenant, between the individual selling physician and the purchasing organization, similarly prevents the individual physician from competing with the purchaser for a stated period of time. The protection provided by this covenant is the same as with the first.

Between the selling medical practice and the buyer: The third type of covenant provides that the selling medical practice as a whole will not compete with the buyer for a fixed period. For example, the selling practice covenants that for two years after the sale and/or during the term of its professional services agreement, it will not compete against the buyer. This covenant protects against the seller's removing the patient base, for which substantial value may have been paid.

Covenants not to compete may extend only to specific categories of patients - managed care or fee for service patients, for example. They may contain different terms and conditions for different covenanting parties. For example, the duration of the covenant and the "protected" service area may differ for covenants with individual physicians and those with the practice as a whole.

If there is more than one type of covenant not to compete, each should be

separately valued.

> **Example:** A practice receives 100% of its revenue from fee for service patients. Both the practice and all individual physicians covenant not to compete with respect to the entire geographic area for two years. In this example, it could be appropriate, with proper factual substantiation (i.e., patient retention rates) to assume that as much as a 100% of the cash flow from patients is protected for two years. In succeeding years the covenant must be analyzed to determine if, and the extent to which, cash flows are protected for the remainder of the estimation period. In the third through fifth years, the covenant prevents the terminating physician from competing with respect to existing patients of the practice, but allows the physician to compete with respect to other patients in the community. If the practice's existing patients account for 60% of the revenues, as much as 60% of the practice's cash flow could be protected, with proper substantiation of patient retention rates.

In valuing covenants not to compete, it is important to analyze not only their terms and conditions, but their real economic effect. In some communities, such covenants may not be legally enforceable, or for other reasons may be widely disregarded. Thus, before any value may be assigned to covenants not to compete, it must be determined if it is unrealistic for the seller to have given a covenant - the "economic reality" test. This test was first enunciated in Schulz v. Commissioner, 294 F.2d 52 (9th Cir. 1961), aff'g 34 T.C. 235 (1960). In this case, the court stated that a covenant "must have some independent basis in fact or some arguable relationship with business reality such that reasonable men, genuinely concerned with their economic future, might bargain for such an agreement." Generally, where the seller is, objectively, likely to pose a real threat of competition, courts will probably sustain some allocation of value to the covenants. In making such a determination, a variety of factors must be considered, such as whether the seller has the ability to compete with the buyer. The courts have stated that the following are important considerations in determining if the seller has the ability to compete:

. Did the seller have a customer network and experience that makes competition real?

. Did the seller have the financial ability to compete?

- Did the seller's physical ability allow for him/her to compete (i.e., age and state of health)?

- Did noncontractual restrictions, such as limited market entry, prohibit the seller from competing in the absence of the covenant not to compete? (This factor may be important where a certificate of need requirement exists, for example.)

- Did the seller intend to retire or leave the geographic area covered by the covenant?

- Did negotiations to sell the business make it clear to the seller that a covenant was essential to the transaction?

Another important factor in the value of a covenant not to compete is the portion of protected cash flow attributable to fee for service and capitated contracts. Individual physicians' covenants not to compete may be more valuable if more revenues are attributable to fee for service arrangements than managed care contracts, because patients are freer to choose to see the competing physician. In other words, the covenant protects the cash flow generated by the ability of the individual physician and/or practice to attract and retain patients in the community. Where more patients are "locked in" a practice by managed care arrangements, the physician's covenant not to compete may be less valuable. Also, where covenants not to compete extend to managed care patients, care should be taken to ensure that the valuation appraisal does not assign value to the same revenues as part of the valuation of the covenants not to compete and the contracts themselves. (Valuation of managed care contracts is discussed in the following section.)

In addition, whether the covenant not to compete is executed in conjunction with an employment contract is also significant. If it is, both agreements need to be evaluated carefully because their provisions, and their values, may overlap. An employment agreement may convey similar benefits and cover the same time period as a covenant not to compete, and thus its value is not separate and distinct from the value of the covenant

In summary, covenants not to compete have value if the terms are reasonable and if the seller is truly being compensated for giving up the right to forego opportunities that would place him/her in competition with the purchaser. Often a large portion of total BEV is assigned to covenants; the assignment may

appear to be arbitrary, with little discussion of the basis for establishing value. Such appraisals do not provide an adequate basis for establishing fair market value.

(6) Managed Care Contracts

Fixed revenue contracts are often an important source of value for a business entity. Managed care contracts are such an asset for a health care provider.

Managed care contracts are typically valued under an income approach. In this approach, revenues associated with contracts are determined, minus a pro rata portion of expenses (including capital charges). The resulting cash flow is discounted to arrive at the contracts' present value.

The valuation analysis should list all contracts and their term. Value should be allocated using this methodology only to contracts providing for payment on a capitated basis, because generally only that revenue is certain.

A significant issue in valuing managed care contracts is whether the contracts have value after their term. The assignment of value after the contract expires, like the assignment of value to a covenant not to compete after its expiration/termination, seems questionable and should be carefully scrutinized. Any such assignment should be well-documented and supported by information such as the following:

- the percentage of contracts renewed annually
- the number of years the practice serviced the contracts
- the contract retention rate prevailing in the community
- the portion of the community that receives health care under managed care contracts
- whether contracts have recently been renewed at lower rates than in previous years

(7) Trade Name

Generally, an individual physician practice retains the benefits of a trade name - "Dr. Jane Doe, M.D., Family Practice," for example - only so long as the practitioner remains in practice. The trade name of a large group practice - "Women's Health Clinic of Gotham," for example - may be an important and enduring asset, however, particularly where the practice has operated under the same name for a long time. A number of other factors influence the value of a trade name.

The premise according to which the name of a physician group practice has value is that patients can choose where to receive medical treatment. Thus, any appraisal in which value is assigned to a trade name should discuss factors bearing on the name's influence on patient choice, such as organizational reputation, individual physician reputation, location, longevity/history, innovation, and historical advertising of the name.

The income method is generally used to value trade names. Typically, fee-for-service and managed care revenues are addressed separately, reflecting the different degree or level of patient choice reflected in such revenues. Managed care contracts should result in little (if any value) assigned to trade name; as noted above, those contracts are generally separately valued. As with the application of the income approach to other intangible assets, discounted cash flows reasonably attributed to the target asset for the estimation period are totalled to arrive at fair market value.